

ACCESSION NR: AP4039287

increasing mass  $m_1$ . Under working conditions the microphone is elastically suspended, with its membrane facing downward. The specific frequency of the support should be substantially below the lower limit of the microphone working range. Orig. art. has: 5 figures and 1 formula.

ASSOCIATION: Leningradskiy institut kinoinzhenerov (Leningrad Institute of Cinematographic Engineers)

SUBMITTED: 08Sep63

DATE ACQ: 12Jun64

ENCL: 02

SUB CODE: IE, GP

NO REF SOV: 001

OTHER: 000

Card 2/4

VAKHITOV, Ya.Sh.

Calculating the limiting values of the polarising voltage of electrostatic sound converters. Trudy LIKI no.10:37-46 '64.

Double-sided electrostatic loudspeaker with nontensioned diaphragm. Ibid.147-56 (MIRA 18:9)

1. Kafedra akustiki Leningradskogo instituta kinoinzhenerov.

STEPANOV, V.M.; VAKHITOVA, E.A.; YEGOROV, TS.A.; AVAYEVA, S.M.

Phosphoserine-containing peptide fragment of pepsin. Izv. AN SSSR.  
Ser. khim. no.4:759 '65. (MIRA 18:5)

1. Institut khimii prirodnikh soyedineniy AN SSSR.

L 2536-66 EWT(d)/EWP(v)/EWP(k)/EWP(h)/EED-2/EWP(1)

ACCESSION NR: AP5021437

UR/0146/65/008/004/0046/0049

621.3.079

47  
46  
B

AUTHOR: Vakhilakov, G. V.

TITLE: Extremum regulator based on a quantization-level circuit

SOURCE: IVUZ. Priborostroyeniye, v. 8, no. 4, 1965, 46-49

TOPIC TAGS: pulse code modulation, pulse generator, transistorized circuit, logic circuit, automatic control equipment

ABSTRACT: The details of a new type of extremal regulator built on the principle of quantization levels are discussed. The block diagram of the regulator is divided into quantization and logic circuits. The quantization circuit gives information on the displacement of the moving point along the characteristic extremal. The logic circuit analyzes various situations and directs the moving point towards the extremal peak. A null-indicator detects the transition time of the moving point from back to front on the extremal curve. A second null-indicator, which has the reverse characteristic of the first one, takes over as soon as the voltage starts decreasing,

Card 1/2

L. 2536-66

ACCESSION NR: AP5021437

and the point moves away from the extremum. The regulator was successfully operated with 21 transistors and 2 electron tubes. Orig. art. has: 4 figures. [04]

ASSOCIATION: Kiyevskiy ordena Lenina politekhnicheskij institut (Kiev Polytechnic Institute)

SUBMITTED: 29 May 65

ENCL: 00

SUB CODE: EC, IE

NO REF SOV: 000

OTHER: 000

ATD PRESS 4110

Card

2/2 *md*

BYALYY, S. inzhener; SOLOMCHENKO, P., inzhener; ~~VAKHLAKOV~~, P., inzhener;  
SOLOV, N., inzhener.

Work experience of flour mills at grain procurement stations. Muk.-elev.  
prom. 22 no.6:24-26 Je '56. (MIRA 9:9)

1.Dmitrovskaya mel'nitsa (for Vakhlov).  
(Flour mills)

CIA-RDP86-00513R001858410011-2"

VAKHLAKOVA L.G.

GOLOVANOVA, M.A.; YERETNOVA, Ye.M.; VAKHLAKOVA, L.G.; SHUL'MAN, S.S.;  
DUBROVA, V.S.

Vaccinotherapy of chronic dysentery; authors' abstract. Zhur.mikro-  
biol.epid.i immun. no.8:31-32 Ag '54. (MLRA 7:9)

1. Iz Sverdlovskogo meditsinskogo instituta (dir. A.F.Zverev, nauchnyy  
rukovoditel' dotsent V.S.Durova)

(DYSENTERY, BACILLARY, therapy,  
\*vacc.)

(VACCINES AND VACCINATION,  
\*ther. of dysentery, bacillary)

VAKHLAMOV, I.

Bonus system for designing and adopting new equipment. Sots.trud  
4 no.7:39-45 J1 '60. (MIRA 13:8)  
(Bonus system) (Technological innovations)

VAKHLAMOV, I.

Bonus payment to workers for creating and introducing technological innovations. Sots. trud 6 no.8:133-138 Ag '61.

(MIRA 14:8)

(Bonus system) (Technological innovations)

VASIL'YEV, Ye.; VAKHLAMOV, I.

Improve the economic stimulation for the creation and use of  
modern technology. Sots. trud 7 no.8:40-47 Ag '62.  
(MIRA 15:10)

(Technological innovations) (Bonus system)

VAKHLAMOV, I.

Necessary book on problems. Sots. trud 8 no.12:150-152  
D '63. (MIRA 17:2)

VAKHILAKOV, I.A.

Automobile Industry

Competition for rendering operations less laborious. Avt. trakt. prom. No. 5, 1952

Monthly List of Russian Accessions, Library of Congress, October 1952, Unclassified

VAKHLAMOV, I.A.

Current tasks of setting technical labor norms in automobile and tractor  
production. Avt.trakt.prom. no.10:1-2 0 '53. (MLRA 6:11)

1. Ministerstvo mashinostroyeniya.

(Automobile industry)

VAKHLAMOV, I.A.

ZELIKSON, M.Z., inzhener, retsenzent; VAKHLAMOV, I.A., inzhener, redaktor;  
MODEL', B.I., tekhnicheskiy redaktor

[Acquiring new techniques and improving the economy of enterprises;  
from experience in socialist competition in plants of the automobile,  
tractor, and roller-bearing industries] Osvoenie novoi tekhniki i  
uluchshenie ekonomiki predpriatii; iz opyta sotsialisticheskogo  
sorevnovaniia na zavodakh avtomobil'noi, traktornoj i podshipnikovoi  
promyshlennosti. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit.  
lit-ry, 1954. 291 p. [Microfilm] (MLRA 8:3)  
(Socialist competition) (Efficiency, Industrial)

VAKHIANOV, I.A.

Improving the labor management of auxiliary workers. Avt.trakt.prom.  
no.1:7-9 Ja '55. (MIRA 8:4)

1. Ministerstvo avtomobil'nogo, traktornogo i sel'skokhozyaystvennogo  
mashinostroyeniya.  
(Automobile industry workers)

VAKHLAMOV, I.A.

Improve production norms in the automotive and tractor industry.  
Avt.trakt.prom. no. 4:1-2 Ap '55. (MIRA 8:5)

1. Ministerstvo avtomobil'nogo, traktornogo i sel'skokhozyaystven-  
nogo mashinostroyeniya.  
(Automobile industry) (Tractor industry) (Labor productivity)

MILNER, M.E., kandidat tekhnicheskikh nauk; GAL'TSOV, A.D., redaktor;  
BILINKIS, M.S., inzhener, retsenzent; VAKHIANOV, I.A., retsenzent;  
SHUMILKIN, V.K., retsenzent; PARNENKO, K.V., redaktor; MATVEYEVA,  
Ye.M., tekhnicheskiiy redaktor

[Setting technical norms in machine building] Tekhnicheskoe normirovanie v mashinostroenii. Pod red. A.D.Gal'tsova. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1957. 363 p. (MIRA 10:4)  
(Machinery industry—Production standards)

ACCESSION NR: AP4047825

3/2175/54/20/2

AUTHOR: Vakhlamov, S. V.

TITLE: Calculation of jet trajectory in lateral flow

SOURCE: Inzhenerno-fizicheskii zhurnal, no. 10, 1964, 112-116

TOPIC TAGS: compressible fluid, trajectory equation, jet flow, static pressure

ABSTRACT: The trajectory of a compressible jet in lateral flow is calculated by projecting the equations of motion on the x- and y-coordinate axes. The contour of the jet is shown in Fig. 1 on the enclosure outlined by the sections 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.

$$(\rho_a U_a^2 + p_a) F_{ad} + \rho_a U_a^2 F_a \cos \alpha_a = \int_{F_{bc}} \rho U^2 \cos \alpha' dF + \cos \alpha \int_{F_{bc}} p dF \quad (1)$$

$$\rho_a U_a^2 F_a \sin \alpha_a + \int_{F_{dc}} p dF = \int_{F_{bc}} \rho U^2 \sin \alpha' dF + \sin \alpha \int_{F_{bc}} p dF + p_a F_{ad} \quad (2)$$

where F - flow cross section. The following assumptions are made to facilitate  
Card 1/L

L 12057-65

ACCESSION NR: APL047825

solution of these equations: the gas velocity on the jet boundaries coincides with its trajectory; the static pressure in the jet is the same as that of the external flow; the change in jet parameters between the nozzle and the exit of the jet contour is negligible. The differential equation for the jet

$$\frac{dx}{dy} = \operatorname{ctg} \alpha_0 + \frac{\rho_0 U_0^2}{\rho_\infty U_\infty^2} \frac{1}{\sin \alpha_0} \frac{F_2}{F_0},$$

where  $F_2$  is determined by assuming it to be given by the sum of an area of a trapezoid and a semicircle. In its integrated form, the trajectory equation yields

$$\bar{x} = \operatorname{ctg} \alpha_0 \bar{y} + \frac{1}{2} \frac{\rho_0 U_0^2}{\rho_\infty U_\infty^2} \frac{1}{\sin \alpha_0} \bar{y}^2.$$

The values predicted by this equation are compared to the experimental data of Yu. V. Ivanov (Motorturbo-stroeniye, No. 3, 1952) and G. S. Shandorov (ibid., No. 1, 1957) as well as with equation (11) of G. N. Avramovich (Teoriya turbulentnykh strom, Fizmatgiz, 1960), and agreement is found to be satisfactory. (12) (13)

Case 2/4

ACCESSION NR: APL447825

ASSOCIATION: none

SUBMITTED: 26Jul63

ENCL: 01

SUB CODE: ME

NO REF SOV: 006

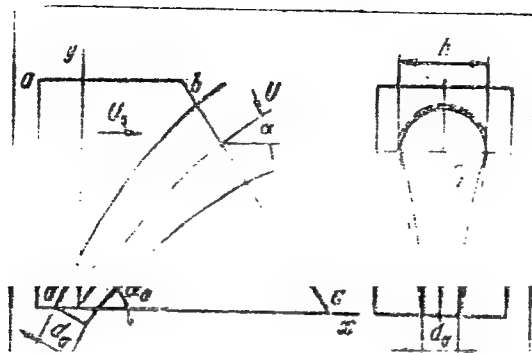
OTHER: 000

Card 3/4

L 12057-65

ACCESSION NR: AP4047825

ENCLOSURE: 01



Card u/b

VAKHLAMOV, V.A.

Capacity rating of electric motors of ~~building~~ machinery. Trudy  
GISI no.30:173-175 '61. (MIRA 16:9)

VAKHLETOV, V.A.

[Electrical equipment for pumping stations; a practical manual for students taking the "Water Supply and Sewerage Systems" course] Elektrooborudovanie nasosnykh stantsii; uchebno-metodicheskoe posobie dlia studentov spetsial'nosti "Vodopostavlenie i kanalizatsiia," Gor'kii, Gor'kovskii inzhenerno-stroit. in-t, 1963. 34 p.  
(MIRA 17:10)

VAKHLAMOV, V.K.; BUCHIN, A.I.

Experimental investigation of friction in the suspensions of  
automobiles with small cylinder capacity. Avt.prom. 31 no.4:29-  
32 Ap '65. (MIRA 18:5)

1. Moskovskiy avtomobil'no-dorozhnyy institut i Moskovskiy zavod  
malolitrzhnykh avtomobiley.

VAKHLER, B., inzh. (Donetsk)

Ozone purifies water. Zhil.-kom. khoz. 13 no.5:27-28 My '63.  
(MIRA 16:8)

(Chasov Yar—Water—Ozonization)

VAKHLER, B.A., inzh.

Ozonization of water of the North Donbas Canal. Khidrotekhnika  
melior 8 no.6:190-191 '63.

18(5); 25(2)

PHASE I BOOK EXPLOITATION

SOV/1775

Vakhler, Boris L'vovich

Nasosy i nasosnyye stantsii metallurgicheskikh predpriyatiy (Pumps and Pumping Stations of Metallurgical Plants) Moscow, Metallurgizdat, 1958. 255 p. Errata slip inserted. 7,500 copies printed.

Ed.: I.G. Sal'nikov; Ed. of Publishing House: A.A. Vagin; Tech. Ed.: M.K. Attopovich.

PURPOSE: This book is approved by the USSR Ministry of Higher Education as a text for students of ferrous metallurgical tekhnikums and may also be used by engineering and technical personnel of metallurgical plants studying to improve their qualifications.

COVERAGE: The book covers basic data on pumps and pumping stations of the water supply and sewage systems of metallurgical plants, presents methods of selecting pumps, and describes the arrangement of pumping equipment, electric power supply, automation and operation

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Pumps and Pumping stations (Cont.)

of pumping stations. Construction, operating principles, and performance characteristics of centrifugal, axial and piston pumps are presented. In preparing the book the author made use of operating data of several metallurgical plants of the Donbassvodyrest (Donbass Water Resources Trust), and the latest published data and design materials of the following Institutes: Gipromez (State Institute for the Design and Planning of Metallurgical Plants), vodokanalproekt (All-Union Trust for the Design, Planning, and Study of Water Supply and Sewer Systems and Hydrotechnical Structures), Teploelektrproyekt (All-Union State Institute for the Design and Planning of Thermal Electric Power Plants), Giprostal' (State Institute for the Design and Planning of Steel Industry Establishments). The author thanks reviewers I.M. Ushakov and I.N. Izotov. S.S. Rudnev, A.Ye. Korovayev, and M.G. Kochneyev are mentioned as having made original theoretical investigations on the design of centrifugal pumps. It is stated that VIGM (All-Union Scientific Research Institute of Hydraulic Machinery Building) plays the leading role in the development of modern designs of pumps. There are 28 Soviet references.

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Pumps and Pumping Stations (Cont.)

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6/24/59

VAKHLER, Boris L'vovich; INDENBAUM, V.S., red.; GOLYATKINA, A.G., red.  
izd-va; MIKHAYLOVA, V.V., tekhn. red.

[Pumping and compressor plant operator; manual for improving  
the qualifications of workers] Mashinist nasosnykh i kom-  
pressornykh stantsii; uchebnoe posobie dlia povyshenia kva-  
lifikatsii rabochikh. Moskva, Gos. nauchno-tekhn. izd-vo lit-  
ry po chernoi i tsvetnoi metallurgii, 1961. 224 p.

(MIRA 14:9)

(Air compressors) (Pumping machinery)

VAKHLER, B.L. (Stalino)

Ozonization of drinking water under actual operating conditions.  
Vod. i san. tekhn. no.8:21-25 Ag '61. (MIRA 14:9)  
(Chasov yar--Water--Ozonization)

VAKHLER, B.L., inzh. (Donetsk)

Study of ozonization processes in the water of the Northern  
Donets - Donets Basin Canal. Vod.i san.tekh. no.2:19-22 F '63.  
(MIRA 16:2)  
(Chasov-Yar--Water--Ozonization)

VAKHLER, Boris L'vovich

[Pumping stations in metallurgical enterprises; handbook]  
Nasosnye stantsii metallurgicheskikh predpriatii; spra-  
vochnik, Moskva, Metallurgizdat, 1964. 288 p.  
(MIRA 17:4)

VAKHLER, Boris L'vovich, kand. tekhn. nauk; SOLUYANOV, P.A., inzh.,  
retsenzent; MATVEYEV, N.A., kand. tekhn. nauk,  
retsenzent; KOZHINOV, V.F., doktor tekhn. nauk,  
retsenzent

[Ozonization of the water of the Northern Donets-Donets  
Basin Canal for drinking purposes] Ozonirovanie vody ka-  
nala Severnyi Donets-Donbass dlia pit'evykh tselei. Mo-  
skva, Stroiizdat, 1965. 83 p. (MIRA 18:12)

BATENKO. V.F., inzh.; GVOZDEV, V.F., inzh.; VAKHLER. V.A., inzh.; PIL'SHCHIKOV.  
A.P., inzh.; ROGATSKIN, B.S., inzh.; BELYAKOVA, L.F., inzh.; KATKOV,  
G.S., inzh.

Ion-exchange filters with compound operation in power blocks with  
300 Mw. ratings. Elek. sta. 36 no.10:8-15 0 '65.

(MIRA 18:10)

VAKHLIS, E.I.

VAKHLIS, B. I. i ROKHLIN, S. I.

34227. Kimiko-toksikologicheskiye issledovaniya Po Delam ob otravleniyakh.  
Kriminalistika i Nauch.-Sudeb. Ekspertiza. S.E. Z. Kiyev, 1949, c.  
249-70

SO: Knizhnaya Letopis' No 6, 1955

VAKHLIS, M.Ye. (Chernovitsy)

Application of one formula. Mat. v shkole no.1:56-57 Ja-F '61.  
(MIRA 14:3)

(Equations)

SOKOLOV, I.P.; VAKHMAN, D.Ye.

Optimum linear sinphase antennas with continuous current distribution. Radiotekh. i elektron. 3 no.1:46-55 Ja '58. (MIRA 11:2)  
(Radio--Antennas)

VAKILIAN, I.S.

Neurological disorders in acute leukemia. Sov. med. 28 no.8:  
111-118 Ag '65. (MIRA 18:9)

1. Nevrologicheskoye otdeleniye (nauchnyy rukovoditel' - prof.  
M.B.TSuker) i gematologicheskoye otdeleniye (rukovoditel' -  
prof. Ye.A.Kost) Klinicheskoy bol'nitsy imeni Botkina (glavnyy  
vrach - dotsent Yu.G.Antonov), Moskva.

SKUCHAYEVA, Ye.D.; VAKHMAN, I.S.

Use of medical gymnastics in inferior paraplegia. Med. sestra 21 no.5:  
48-50 My '62. (MIRA 15:5)

1. Iz otdeleniya lechetnoy fizkul'tury bol'nitsy imeni S.P.Botkina,  
Moskva.

(EXERCISE THERAPY)

(PARAPLEGIA)

VAKHMAN, I.S.

(Moskva)

Clinical aspects of nervous system diseases in chronic leukemia.  
Klin. med. 41 no.9:104-110 S'63 (MIRA 17:3)

1. Iz nevrologicheskogo otdeleniya ( nauchnyy rukovoditel' -  
prof. M.B. TSuker) i gematologicheskogo otdeleniya (rukovo-  
ditel' - prof. Ye.A. Kost) Klinicheskoy bol'nitsy imeni S.P.  
Botkina (glavnyy vrach - dotsent Yu.C. Antonov), Moskva.

VAKHMAN, I.S.

Cerebellar hemorrhages in acute leukemia. Zhur. nevr. i psikh.  
65 no.9:1340-1345 '65. (MIRA 12:9)

1. Nevrologicheskoye otdeleniye nauchnyy rukovoditel' - prof.  
M.B. TSuker) i genatologicheskoye otdeleniye (rukovoditel' -  
prof. Ye.A. Kost) bol'nitsy im. Botkire (glavnyy vrach -dotsent  
Yu.G. Antonov), Moskva.

ANDREYEV, L.L.; VAKHMAN, V.I.; CHEPURIN, P.I.; MIROSHNICHENKO, V.F.;  
BOGACHEV, A.S.; VOL'VACH, Ye.Ye., agronom-entomolog; CHEBOTAROV,  
M.Ya., agronom-entomolog (Georgiyevskiy rayon); ZGADOV, G.L.,  
agronom po zashchite rasteniy

Killing shield bugs in combines. Zashch.rast.ot verd. i bol.  
7 no.6:30-31 Je '62. (MIR. 15:12)

1. Zaveduyushchiy Severo-Kavkazskim opornym punktom Vsesoyuznogo  
instituta zashchity rasteniy (for Andreyev). 2. Zamestitel' direk-  
tora, glavnyy agronom sovkhoza "Kurskoy" (for Vakhmar). 3. Zamestitel'  
direktora, glavnyy agronom oporno-pokazatel'nogo sovkhoza "Obil'-  
nenskiy" (for Chepurin). 4. Glavnyy inzh. sovkhoza "Kurakiy" (for  
Bogachev). 6. Severo-Kavkazskiy opornyy punkt Vsesoyuznogo instituta  
zashchity rasteniy (for Vol'vach). 7. Sovkhoz "Starodubskiy"  
(for Zgadov).

(Stavropol Territory--Wheat--Diseases and pests)  
(Stavropol Territory--Eurygasters)

FUKS, I.M.; VALEYEVA, F.N.; POPKOVA, F.V.; VOLKOVA, L.P.; BELOGOLOVSKAYA, T.A.;  
ROMASHKEVICH, I.K.; Minimali uchastiye: MOROZOVA, L.M.; DASHEVSKAYA,  
S.I.; VAKHMINA, L.S.; KARAVAYEVA, G.V.; IVANOVSKIY, A.K.; ZHUKHINA,  
G.Ye.; SOLOV'YEVA, G.M.; ANDRIYANOVA, M.V.; AKHMETOVA, V.M.;  
NEMIROVSKAYA, M.Ye.; MUSORINA, L.S.; KALASHNIKOVA, Ye.I.; PESHKO,  
A.P.; IVANOVA, N.V.; ALKESEYEVA, N.I.; SADOVNIKOVA, G.N.

Study on the possibility of reducing the diphtheria vaccine dose in  
revaccination of 9 to 12 year-old schoolchildren. Zhur. mikrobiol.,  
epid. i immun. 41 no.11:103-107 '65. (MIRA 18:5)

1. Ufimskiy institut vaktsin i syvorotok imeni Mechnikova.

VAKHMINTSEV G.S.

SERGEYEV, A.A., red.; ANPILOGOV, I.M., red.; ASSONOV, V.A., red.; BABAYANTS, N.A., red.; BABOKIN, I.A., red.; BALAMUTOV, A.D., red.; BOGORODSKIY, N.N., red.; BOLOHENKO, D.N., red.; BUCHNEV, V.K., red.; VAKHMINTSEV, G.S., red.; VORONKOV, A.K., red.; GARKALENKO, K.I., red.; GORBATOV, P.Ye., red.; GOLOVLEV, V.Ya., red.; DOKUCHAYEV, M.M., red.; DUBNOV, L.V., red.; YEVTSEYEV, A.D., red.; YEREMENKO, Ye.K., red.; ZENIN, N.I., red.; KRIVONOGOV, K.K., red.; KUPALOV-YAROPOLK, I.K., red.; MATSYUK, V.G., red.; NIKOLAYEV, S.I., red.; ONISHCHUK, K.N., red.; PETROV, K.P., red.; PILYUGIN, B.A., red.; PLATONOVA, A.A., red.; POLESIN, Ya.L., red.; POKROVSKIY, L.A., red.; POMETUN, D.Ye., red.; POLYUSHKIN, A.Kh., red.; REYKHER, V.P., red.; SEDOV, N.A., red.; SIDORENKO, I.T., red.; FIDELEV, A.A., red.; CHAKHMAKHCHEV, A.G., red.; CHEMODUROV, M.Ya., red.; SHUMAKOV, A.A., red.; YAREMENKO, N.Ye., red.; PARTSEVSKIY, V.N., red.izd-va; ATTOPOVICH, M.K., tekhn.red.

[Standard safety regulations for blasting operations] Edinye pravila bezopasnosti pri vzryvnykh rabotakh. Izd.2. Moskva, Gos. nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1958. 318 p. (MIRA 13:1)

1. Russia (1923- U.S.S.R.) Komitet po nadzoru za bezopasnym vedeniyem rabot v promyshlennosti i gornomu nadzoru. (Mining engineering--Safety measures)

VAKHMINTSEV, V.A., slesar'

Machine for cutting metal screens. Suggested by V.A.Vakhmintsev.  
Rats.i izobr.predl.v stroi. no,16:47-48 '60. (MIRA 13:9)

1. Stalingradskoye stroitel'no-montazhnoye upravleniye tresta  
Stroytermoizolyatsiya, Moskva, ul.Yermolovoy, d.22.  
(Cutting machines)

VAKHMISTROV, B.V.

Melting aluminum scrap in commercial frequency, induction crucible  
furnaces. TSvet. met. 37 no.6:86-87 Je '64. (MIRA 17:9)

VAKHMISTROV, D.B.

Increasing the productivity of plants. Priroda 50 no.12:53-55  
D '61. (MIRA 14:12)

1. Institut fiziologii rasteniy im. K.A.Timiryazeva AN SSSR,  
Moskva.

(Plant physiology)

VAKHMISTROV, D.B.; ZHURBITSKIY, Z.I.

Extent of the selective absorption capacity of plants for the  
elements of mineral nutrition. Dokl. AN SSSR 151 no.5:1228-1231  
Ag '63. (MIRA 16:9)

1. Institut fiziologii rasteniy im. K.A.Timiryazeva AN SSSR.  
Predstavleno akademikom A.L.Kursanovym.  
(Plants—Nutrition) (Minerals in plants)

VAKHMISTROV, D.B.

Magnitude of the "apparent free space" of plant roots. Fiziol.  
rast. 12 no.5:805-813 S-0 '65. (MIRA 19:1)

1. Institut fiziologii rasteniy imeni Timiryazeva AN SSSR, Moskva.

VAKHMISTROV, I.S., inzh.

Using phototubes for the protection of d.c. high-tension bus conductors.

Elek.sta. 28 no.12:69-71 D '57. (MIRA 12:3)

(Bus conductors (Electricity)) (Photoelectric cells)

GATLAND, K.W.; DUGOSHIN, V.N. [translator]; MAKSIMOV, M.I. [translator];  
~~VAKHMISTROV, V.V. [translator]; GRISHIN, A.P., doktor tekhnicheskikh~~  
nauk, redaktor; KRUGLIKOV, F.F., redaktor; KLIMENKO, S.V., tekhnicheskii redaktor

[Development of the guided missile. Translated from the English]  
Razvitie upravlyaemykh snaryadov. Perevod s angliiskogo V.N.Duboshina  
i dr; Pod red. A.P.Grishina. Moskva, Izd-vo inostrannoi lit-ry,  
1958. 369 p. (MLBA 9:12)  
(Guided missiles)

BAKANOV, R.A.; BURYAKOV, Yu.F.; VAKHMISTROV, V.V.; VOLODIN, N.V.;  
KUROCHKIN, V.D.; SAVELOV, V.P.; SUDZILOVSKIY, G.A.;  
MARCHENKO, V.G., red.; BALASHOVA, M.V., red.-leksikograf;  
BERDNIKOVA, N.D., red.-leksikograf; CHAPAYEVA, R.I.,  
tekhn. red.

[Concise English-Russian and Russian-English military  
dictionary] Kratkii anglo-russkii i russko-angliiskii voen-  
nyi slovar'. Moskva, Voen.izd-vo M-va oborony SSSR, 1963.  
560 p. (MIRA 16:4)

(Military art and science--Dictionaries)  
(English language--Dictionaries--Russian)  
(Russian language--Dictionaries--English)

*YAKHMISTROVA, M.P.*

TSAREV, G.P.; ANDRONNIKOV, V.V.; KOBYCHEVA, A.A.; ANNENKOVA, A.A.;  
YAKHMISTROVA, M.P., red.; MEDVEDOVA, S.G., red.; BEKMUKHAMEDOV,  
K., red.; EL'KONINA, F.I., red.

[Kazakhstan; on the 40th anniversary of the Great October Socialist  
Revolution; a concise reference manual and bibliography] *Kazakhskaya*  
SSR: k 40-letiiu Velikoi Oktiabr'skoi sotsialisticheskoi revolutsii;  
kratkie spravochnye svedeniia i ukazatel' literatury. Alma-Ata,  
1957. 233 p. (MIRA 11:10)

1. Alma-Ata. Gosudarstvennaya respublikanskaya biblioteka.  
(Kazakhstan—Statistics) (Bibliography—Kazakhstan)

VAKHMISTROVA, M.P. Prinimali uchastiye: DEYEVA, Z.N.; YAKOVLEVA, A.F.  
CHEZHIK, F., otv. za vypusk

[Reclamation of virgin and waste lands in Kazakhstan; bibliography]  
Osvoenie tselinnykh i zaleshnykh zemel' Kazakhstana; ukazatel'  
literatury. Alma-Ata, 1959. 162 p.

(MIRA 13:11)

1. Alma-Ata. Gosudarstvennaya respublikanskaya biblioteka.  
(Bibliography--Kazakhstan--Reclamation of land)

3 (2)

AUTHOR: Vakhmyanin, A. I.

SOV/6-59-5-17/26

TITLE: On the Production of Labels With Inscriptions by the Photo-composing Method (Ob izgotovlenii nakleyek nadpisey fotonabornym sposobom)

PERIODICAL: Geodeziya i kartografiya, 1959, Nr 5, p 50 (USSR)

ABSTRACT: At the Kazakhskoye AGP (Kazakh Aerogeodetic Enterprise) the tasks involved in the production of labels by the photo-composing method, viz. the composing of photo-letters, exposing, and the finishing of the prints, are carried out by each photo-technician individually. In the paper, the author describes the way in which he carries out these tasks. He achieves a production exceeding the target by 200 to 220 %.

Card 1/1

VAKHMYANIN, V.S., inzhener.

Tubular pneumatic vibrators. Izobr.v SSSR 2 no.5:21 My '57.  
(MIRA 10:7)

(Vibrates) (Molding (Founding))

VAKHMYANIN, V.S.

Milling cutters for straightening grinding wheels. Drawing  
dies with spherical clamps. Izobr.1 rats. no.7:22 J1 '58.  
(Grinding wheels) (Dies (Metalworking)) (MIRA 11:9)

VAKHMYANIN, V.S., inzh.

Increasing the production of cupola furnaces. Izobr.v SSSR  
3 no.1:13 Ja '58. (MIRA 11:1)  
(Cupola furnaces)

VAKHMYANIN, V.S., inch.

Punches for cutting off separator rivet caps. Izhor. 1 rats.

3 no. 4:18 4p '58.

(MIRA 11:7)

(Rivets and riveting)

(Punches)

KASPER, M.A.; VAKHMYANIN, V.S.

The MTZ-5M and MTZ-3 "Belarus" tractors. Biul.tekh.-ekon.inform.no.2:  
61-62 '59, (MIRA 12:3)  
(Tractors)

VAKHMYANIN, V.S., inzh.; TSYVLIN, M.M., inzh.

Semiautomatic production line for polishing radio-phonograph  
cases. Der.prom. 8 no.3:17-18 Mr '59. (MIRA 12:4)  
(Grinding and polishing)

YAKHMYANIN, V.S.

Automatic machine for gluing mosaic parquetry on paper tape.  
Der.prom. 9 no.2:16 F '60. (MIRA 13:6)  
(Parquet floors) (Gluing)

VAKHMYANINA, L.

A year passed. Okhr. truda i sots. strakh. no. 4:55-57 Ap '59.  
(MIRA 12:8)

1. Doverennyy vrach Novosibirskogo oblsovprofa.  
(Novosibirsk Province---Medicine, Industrial)

VAKHNENKO, P.F., inzh.

Calculation for oblique eccentric compression of  
reinforced concrete elements of rectangular cross  
section with asymmetrical reinforcements. Stroi.  
konstr. no.1:44-53 '65.

(MIRA 19:1)

1. Poltavskiy inzhenerno-stroitel'nyy institut.

VAKHNENKO, V.I., inzh.

Results of rail observation. Put' i put.khoz. 8 no.12:8-9 '64.  
(MIRA 18:1)

VAKHNENKO, V.I., inzh.

Operational strength of standard make R50 rails. Trudy TSNIIMK  
no.292:154-165 '65. (MIRA 18:10)

VAKHNEKO, V.I., inzh.

Prevent contact-fatigue defects. Put' i put. khoz. 9 no.11:41-42  
'65. (MIRA 18:11)

VAKHNEYEV, B.A., inzh.; TRYNOV, M.A., inzh.

The VPM-TsNIIME felling and loading machine. Mekh.trud.rab. 11  
no.8:40-44 Ag '57. (MIRA 10:11)  
(Lumbering--Machinery)

V. Choyev, B.A.

ROGOZKIN, A.V., inzhener; VAKHMEYEV, B.A., inzhener

VAKHMEYEV,  
B.A.

General machinery for lumber felling operations. Mekh.trud.rab.9  
no.9:5-8 S'55. (MLRA 8:12)

(Lumbering--Machinery)

VANIN, B.A., MYTUNOV, G.S.

30354

Pogruzka dryevyesiny na nizhnyem lyesnom skladye. Iz opyta Shar'in. Lyeskombinata.  
Myekhanizataiya trudoyemkikh. Tyazhyelykh rabot, 1 49, No 9, s. 22-25

SC: LETCPIS' No. 34

VAKHNIN, A. (g.Salekhard, Yamalo-Nenetskiy okrug)

Construction workers of the Yamal rest in the sanatoriums of the  
south. Okhr.truda i sots.strakh. 4 no.7:19 JI '61. (MIRA 14:7)  
(Yamal-Nenets National Area--Construction workers)

VAKHNIN, E.; SOLOV'YEV, N.; KLOCHKOV, A.

Reconstructing a two-row cow barn into a four-row barn. Sel'.  
stroi. 15 no.9:4-6 S '60. (MIRA 13:9)

1. Direktor sovkhoza "Nizhegorodets" Dal'ne-Konstantinovskogo  
rayona, Gor'kovskoy oblasti (for Vakhnin).. 2. Glavnyy inzhener  
sovkhoza "Nizhegorodets" Dal'ne-Konstantinovskogo rayona,  
Gor'kovskoy oblasti (for Solov'yev). 3. Starshiy prorab sovkho-  
za "Nizhegorodets" Dal'ne-Konstantinovskogo rayona, Gor'kovskoy  
oblasti (for Klochkov).

(Arctic regions--Fur farming)

VAKHNIN, M. I., ed.

Ustroistvo STSB (signalizatsii tsentralizatsii i blokirovki) i ikh ispol'zovanie.  
[ Signaling, centralization and block system equipment and its use ]. Utverzhdeno  
v kachestve uchebnika dlia vtuzov zheleznodorozhnogo transporta. Moskva, gos.  
transp. shel-dor. izd-vo, 1948. 415 p. illus.

DLC: TF615.V27

SO: SOVIET TRANSPORTATION AND COMMUNICATION, A BIBLIOGRAPHY, Library of Congress  
Reference Department, Washington, 1952, Unclassified.

VAKHNIN, M.I.

Inventions and improvements of Russian scientists in the field of railroad automatic signaling, telemechanics and electric communication.

Trudy po ist.tekh. no.11:97-114 '54.

(MLRA 7:9)

(Railroads--Signaling)

~~YAKHININ, M.I.~~; ~~POKROVSKIY, M.A.~~; ~~TALYKOV, A.A.~~; ~~PENKIN, N.F.~~; ~~FUTIN, D.K.~~  
~~YAKHININ, M.I.~~, professor, doktor tekhnicheskikh nauk, redaktor;  
~~GERONIMUS, B.Ye.~~, kandidat tekhnicheskikh nauk, redaktor; ~~KHITROV,~~  
~~P.A.~~, tekhnicheskii redaktor.

[Signaling, central control and block system for use with d.c.  
electric traction] Ustroistva STsB pri elektricheskoi tiage pere-  
mennogo toka. Moskva, Gos.transp.zhel.-dor.isd-vo, 1956. 219 p.  
(Moscow, Vsesoiuznyi nauchno-issledovatel'skii institut zheleznodo-  
rozhnogo transporta. Trudy, no.126). (MLRA 10<sup>2</sup>1)

(Electric railroads--Signaling)

32 (3)

SOV/112-57-5-10946

Translation from: Referativnyy zhurnal. Elektrotehnika, 1957, Nr 5, p 198 (USSR)

AUTHOR: Vakhnin, M. I., Penkin, N. F., Pokrovskiy, M. A., Pugin, D. K.,  
Talykov, A. A.

TITLE: Railroad Signaling Equipment with AC Traction System  
(Ustroystvo STsB pri elektricheskoy tyage peremennogo toka)

PERIODICAL: Tr. Vses. n.-i. in-ta inzh. zh.-d. transpr., 1956, Nr 126,  
p 220, ill.

ABSTRACT: Bibliographic entry.

Card 1/1

VAKHNIN, M.I., professor, doktor tekhnicheskikh nauk.

Semiconductors and their prospective use in railroad transportation.  
Tekh.zhel.dor.15 no.4:4-8 Je '56. (MLRA 9:9)

(Semiconductors)

VAKHNIN, Mikhail Ivanovich, professor; ISLANKINA, T.F., redaktor; GUBIN,  
M.I., tekhnicheskiy redaktor

[Automatic and remote control in the organization of train traffic  
in railroad transportation] Avtomatika i telemekhanika v organiza-  
tsii dvizhenia poezdov na zheleznodorozhnom transporte. Moskva,  
Izd-vo "Znanie," 1957. 23 p. (Vsesoiuznoe obshchestvo po raspro-  
straneniu politicheskikh i nauchnykh znani. Ser. 4, no.2)

(MLRA 10:2)

(Railroads--Automatic train control)

VAKHNIN, Mikhail Ivanovich; VLODAVSKIY, Moisey Il'ich; IL'YENKOV, Viktor Ivanovich; KOTLYARENKO, Nikolay Fedorovich; MAYSHEV, Petr Vladimirovich; BRYLEYEV, A.M., doktor tekhn.nauk, retsenzent; RAKITO, E.I., redaktor; CHIKMENEV, N.M., redaktor; VERINA, G.P., tekhnicheskii redaktor.

[Automatic control and telemechanics for railroad lines] Avtomatika i telemekhanika na peregonakh] Avtomatika i telemekhanika na peregonakh. Pod obshchei red. M.I.Vakhnina. Moskva, Gos.transp.zhel-dor.izd-vo, 1957. 435 p.

(MIRA 10:11)

(Railroads--Signaling--Block system)

32(3)

SOV/112-58-3-4574

Translation from: Referativnyy zhurnal. Elektrotehnika, 1958, Nr 3, p 172 (USSR)

AUTHOR: Kukin, A. N., and Vakhnin, M. I.

TITLE: Electrical Insulation Resistance of Reinforced-Concrete Ties  
(Ob elektricheskoy soprotivlenii izolyatsii zhelezobetonnykh shpal)

PERIODICAL: Vestn. Vses. n.-i. in-ta zh.-d. transp., 1957, Nr 3, pp 9-16<sup>16-</sup>

ABSTRACT: Reinforced-concrete ties with wooden bushings for fastening the rails to the ties cannot, in their present form, function reliably as far as automatic block system is concerned because of a low insulation of concrete and bushings. Impregnating the ties with substances that tend to increase the concrete insulating properties cannot insure sufficient insulation for a long period. Experience has shown that beech bushing impregnated with a 50-per cent Nr-3 bitumen solution in anhydrous anthracene oil can be recommended for experimental sections; also bushings impregnated with a 50-per cent solution of Groznyy petrolatum in anhydrous anthracene oil can be recommended. The

Card 1/2

32(3)

SOV/112-58-3-4574

Electrical Insulation Resistance of Reinforced-Concrete Ties

hole in the concrete tie should be treated with hot bitumen before the wooden bushing is driven into it. Experiments that served to study concrete properties are described, and curves of the electrical resistance of concrete depending on various conditions are given. Similar studies conducted in Hungary are cited. Illustrations: 9.

T.A.K.

Card 2/2

VAKHNIN, M.I., prof., doktor tekhn. nauk.

Prospects for developing a system of railroad signaling. Vest.  
TSNII MPS 17 no.8:19-22 D '58. (MIRA 12:1)  
(Railroads--Signaling)

VAKHNIN, M.I., prof.

Surge protection of transistorized communications and  
automatic control systems. Vest.TSNII MPS 19 no.4:7-10  
'60. (MIRA 13:7)

(Transistors)

(Railroads--Electric equipment) (Electric protection)

BORISOV, Dmitriy Petrovich, doktor tekhn. nauk, prof.; YERPYLOV, Konstantin Nikolayevich, kand. tekhn. nauk; KORMILITSYN, Aleksandr Yakovlevich, kand. tekhn. nauk, dotsent; VAKHNIN, M.I., doktor tekhn. nauk, prof., retsenzent; LISTOV, V.N., doktor tekhn. nauk, prof., retsenzent; NEUGASOV, N.M., kand. tekhn. nauk, dotsent, retsenzent; MARENKOVA, G.I., inzh., red.; NOVIKAS, M.N., inzh., red.; BOBROVA, Ye.N., tekhn. red.

[Automatic and remote control and communications in railroad transportation] Avtomatika telemekhanika i svyaz' na zheleznodorozhnom transporte. Moskva, Vses. izdatel'sko-poligr. ob"edinenie M-va puti soobshchenia, 1961. 283 p. (MIRA 14:7)

(Railroads—Signaling) (Railroads—Communication systems)  
(Railroads—Electronic equipment)

VAKHNIN, M.I., doktor tekhn.nauk, prof.

Regularities of protective action in the silicon diodes and  
their basic characteristics. Vest.TSNII MPS 20 no.5:9-14 '61.

(Lightning protection)

(Diodes)

(MIRA 14:8)

SHMYREV, Aleksandr Georgiyevich; VAKHININ, M.I., doktor tekhn. nauk,  
prof., retsenzent; YEFREMOV, M.I., retsenzent; MARENKOVA,  
G.I., inzh., red.; KHITROVA, N.A., tekhn. red.

[Handbook on automation and remote control on railroads]  
Spravochnik po zheleznodorozhnoi avtomatike i telemekhanika.  
Moskva, Vses. izdatel'sko-poligr. ob"edinenie M-va putei  
soobshchenia, 1962. 311 p. (MIRA 15:3)  
(Railroads) (Automation) (Remote control)

VAKHNIN, M.I., doktor tekhn.nauk; SHISHLYAKOV, A.V., kand.tekhn.nauk

Characteristics of the numerical code system of automatic block  
signaling with code translation. Vest.TSNII MPS 21 no.2:11-16  
'62. (MIRA 15:4)

(Railroads--Signaling--Block system)

VAKHININ, V.M.

Electrical Engineering Abstracts  
May 1954  
Electric Waves and Oscillations

*Mathematics Physics*  
✓2964. Characteristic functions of real resonators.  
V. M. VAKHININ. Dokl Akad. Nauk SSSR, 91, No. 4,  
779-82 (1953) in Russian. English translation, U.S.  
National Sci. Found. NSF-tr-166.

In mathematical physics, use is made of the characteristic functions of ideal resonators in which there are no energy losses at the boundaries of the resonator. This paper considers the problem of real resonators which satisfy the dissipative boundary conditions and possess orthogonality. An infinite two-wire transmission line with energy losses caused by distributed conductivity is considered. Two main types of function are derived and their properties briefly described and illustrated by reference to diagrams of the oscillatory functions. This treatment gives more accurate solutions of several practical problems than the present method based on the ideal resonator.

H. J. H. STARKS

Equipment for measuring  
attenuation of surface waves

The equipment is suitable for the determination of the influence of various factors, such as surface treatment, on the attenuation. A section drawing and photograph of the resonator are shown and a description of the method of measurement.

VAKHNIN, V.M.

Category : USSR/Radiophysics - Radiation of Radio Waves. Antennas

I-5

Abs Jour : Ref Zhur - Fizika, No 2, 1957, No 4526

Author : Vakhnin, V.M.

Title : Concerning One Variant of Standing Waves ("Moving" Waves).

Orig Pub : Tr. Mosk. energ. in-ta, 1956, vyp. 21, 54-57

Abstract : The case of standing waves under study is among the simplest lossless one-dimensional systems such as a string, as two-conductor line, etc. Unlike the generally-known case, the boundary conditions of the "short circuit" type pertain to two points moving along the system with a constant velocity  $v$ . When transforming from stationary coordinates to coordinates moving together with the boundary points, the wave equation assumes the form

$$\frac{\partial^2 u}{\partial t^2} c = (c^2 - v^2) \frac{\partial^2 u}{\partial x^2} - 2v \frac{\partial^2 u}{\partial x \partial t}$$

If  $u$  is considered real, then the variables are not separable, and therefore it is convenient to employ the "requirement of sinusoidal character of oscillations" if standing waves are to be obtained, i.e., it is necessary to specify that the process at each point of observation be sinusoidal with time, without connecting this requirement with the

Card : 1/2

Category : USSR/Radiophysics - Radiation of Radio Waves. Antennas

I-5

Abs Jour : Ref Zhur - Fizika, No 2, 1957, No 4526

separation of variables. The standing wave obtained in such a manner satisfies the moving boundary conditions and can be represented as a superposition of two waves of different lengths traveling in opposite directions. Such a wave differs from a simple standing wave in the presence of a phase shift, which increases linearly along the coordinate, and also by the fact that when the distance between the boundary points is constant the frequency of the oscillations has a speed dependence represented by the factor  $(1 - v_2/c_2)$ .

Card : 2/2

ВАН ВАН, 10

"Physical Meaning of the Anomalous Law of Variation of Attenuation With Frequency for Mode  $H_0$  Waves in a Circular Waveguide," by V. M. Vakhnin, Tr. Mosk. Energ. In-ta, No 21, 1956, pp 58-61 (from Referativnyy Zhurnal -- Fizika, No 10, Oct 56, Abstract No 29500) ✓

The decrease of ohmic losses with higher frequency of mode  $H_{0m}$  waves in circular waveguides with axial symmetry is explained by the fact that at  $\omega \rightarrow 0$  losses bound to the current component directed along the waveguide axis are proportional to  $\omega^{1/2}$ , and the losses bound to the transverse component to  $\omega^{-3/2}$ . As long as longitudinal components for  $H_{0m}$  waves are lacking, the losses decrease as the frequency increases.

SYM.1305

VAKHIN, V.

"Device for Measuring Attenuation of Wave  $H_{01}$  in Short Sections of Waveguides by the Resonant Cavity Method," by V. M. Vakhin and T. F. Kolodina, Radiotekhnika i Elektronika, No 12, Dec 56, pp 1485-1491 ✓

The article describes a method of measuring attenuation, and the construction of a device for testing 50 mm cylindrical waveguides with  $H_{01}$  mode 3-cm waves. The method is based on comparison of the resonance curve of the tested cavity with that of the integrating RC circuit on the screen of a cathode-ray tube. The accuracy of this device is not less than 3.3% for general cases, and only 1% for some specific cases.

This device permits the investigation of the influence of various factors, as surface condition, oxide layer, coating, etc., on the attenuation of mode  $H_{01}$  waves.

This method was worked out in the USSR during the years 1951-1953.

SYM 1305